

# WEST Search History

Hide Items

Restore

Clear

Cancel

DATE: Thursday, November 15, 2007

| Hide?                    | Set Name | Query  | Hit Count |
|--------------------------|----------|--|-----------|
|                          |          | <i>DB=USPT; PLUR=YES; OP=ADJ</i>   |           |
| <input type="checkbox"/> | L1       | (546/219.ccls. or 514/328.ccls.) and (depression or anxiety or apnoea or migraine) | 40        |

END OF SEARCH HISTORY

```

=>.s  C19 H28 N2 O3/mf
L4      1376 C19 H28 N2 O3/MF

=> s l4 and piperidin?
      1236574 PIPERIDIN?
L5      277 L4 AND PIPERIDIN?

=> s l5 and piperidinedione
      4873 PIPERIDINEDIONE
L6      4 L5 AND PIPERIDINEDIONE

```

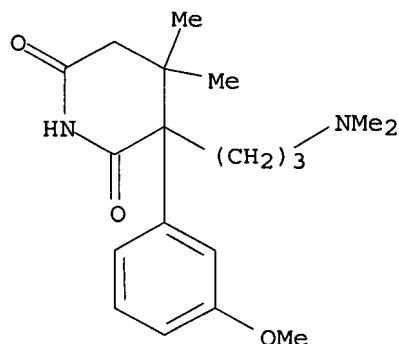
=> d 1-3

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L6  ANSWER 1 OF 4  REGISTRY  COPYRIGHT 2007 ACS on STN
RN  732209-36-8  REGISTRY
ED  Entered STN:  24 Aug 2004
CN  2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-
    4,4-dimethyl-, (+)- (CA INDEX NAME)
FS  STEREOSEARCH
MF  C19 H28 N2 O3
CI  COM
SR  CA

```

Rotation (+).



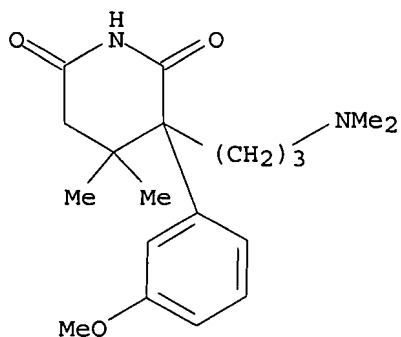
**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

```

L6  ANSWER 2 OF 4  REGISTRY  COPYRIGHT 2007 ACS on STN
RN  117576-37-1  REGISTRY
ED  Entered STN:  18 Nov 1988
CN  2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-
    4,4-dimethyl-, (-)- (CA INDEX NAME)
FS  STEREOSEARCH
MF  C19 H28 N2 O3
CI  COM
SR  CA
LC  STN Files:  BEILSTEIN*, CA, CAPLUS, USPATFULL
    (*File contains numerically searchable property data)

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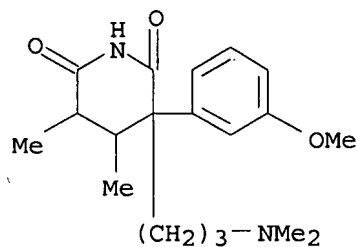
Rotation (-).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

6 REFERENCES IN FILE CA (1907 TO DATE)  
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 117539-18-1 REGISTRY  
ED Entered STN: 11 Nov 1988  
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-  
4,5-dimethyl- (9CI) (CA INDEX NAME)  
MF C19 H28 N2 O3  
SR CA  
LC STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE REG

|                      |            |         |
|----------------------|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL   |
|                      | ENTRY      | SESSION |
| FULL ESTIMATED COST  | 32.10      | 40.34   |

FILE 'REGISTRY' ENTERED AT 11:02:53 ON 15 NOV 2007  
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STRUCTURE FILE UPDATES: 14 NOV 2007 HIGHEST RN 953817-57-7  
DICTIONARY FILE UPDATES: 14 NOV 2007 HIGHEST RN 953817-57-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> STR 732209-36-8

:END

L7 STRUCTURE CREATED

=> S L7 FAM FUL

FULL SEARCH INITIATED 11:02:56 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 20 TO ITERATE

100.0% PROCESSED 20 ITERATIONS 13 ANSWERS  
SEARCH TIME: 00.00.01

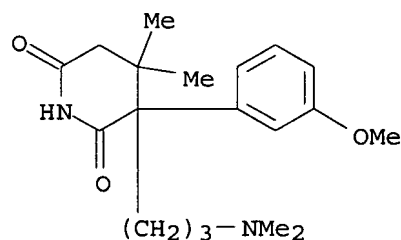
L8 13 SEA FAM FUL L7

=>

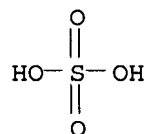
=> D SCAN

L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-  
dimethyl-, sulfate (1:1)  
MF C19 H28 N2 O3 . H2 O4 S

CM 1



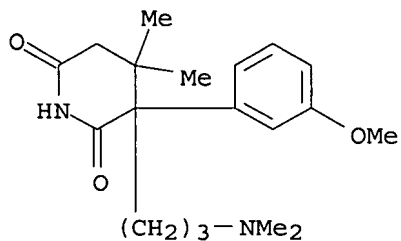
CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):12

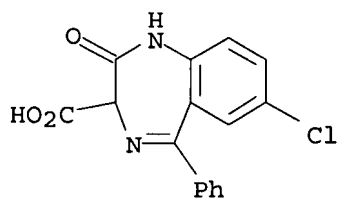
L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN 1H-1,4-Benzodiazepine-3-carboxylic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, monopotassium salt, compd. with potassium hydroxide (K(OH)) (1:1), mixt. with 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-2,6-piperidinedione (9CI)  
MF C19 H28 N2 O3 . C16 H11 Cl N2 O3 . H K O . K  
CI MXS

CM 1



CM 2

CM 3



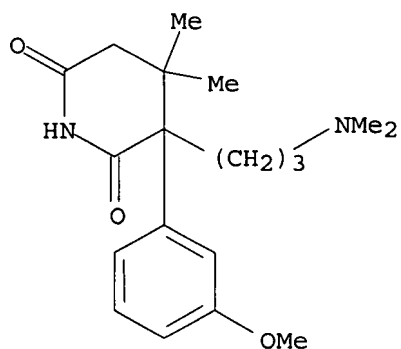
● K

CM 4

K-OH

L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (+)-  
MF C19 H28 N2 O3  
CI COM

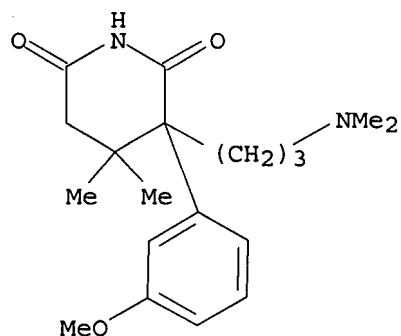
Rotation (+).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-  
 dimethyl-, (-)-  
 MF C19 H28 N2 O3  
 CI COM

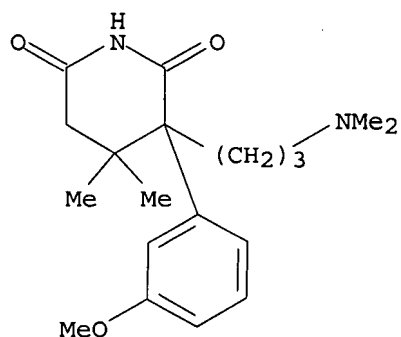
Rotation (-).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-  
 dimethyl-, monohydrochloride, (+)- (9CI)  
 MF C19 H28 N2 O3 . Cl H

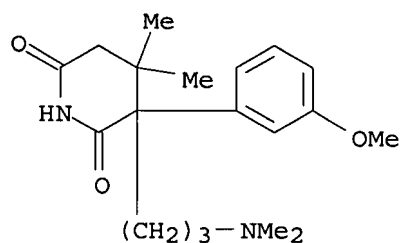
Rotation (+).



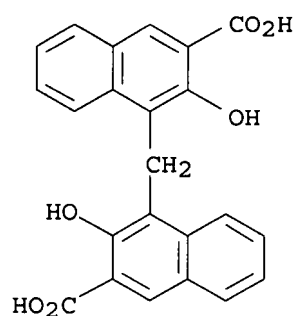
● HCl

L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2-Naphthalenecarboxylic acid, 4,4'-methylenebis[3-hydroxy-, compd. with  
 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-2,6-  
 piperidinedione (1:1) (9CI)  
 MF C23 H16 O6 . C19 H28 N2 O3

CM 1

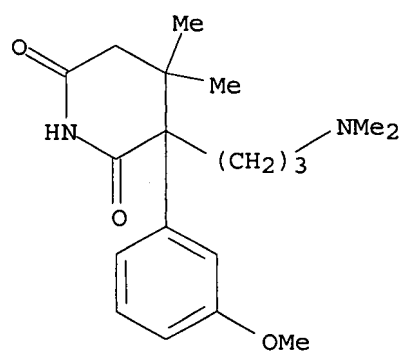


CM 2



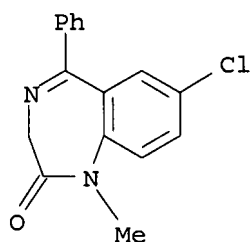
L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-  
 dimethyl-, monohydrochloride, mixt. with 7-chloro-1,3-dihydro-1-methyl-5-  
 phenyl-2H-1,4-benzodiazepin-2-one (9CI)  
 MF C19 H28 N2 O3 . C16 H13 Cl N2 O . Cl H  
 CI MXS

CM 1

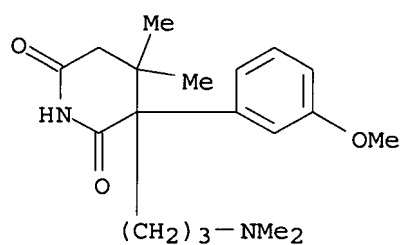


● HCl

CM 2

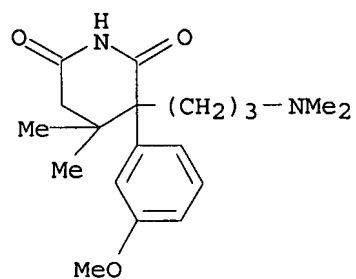


L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-  
 MF C19 H28 N2 O3  
 CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

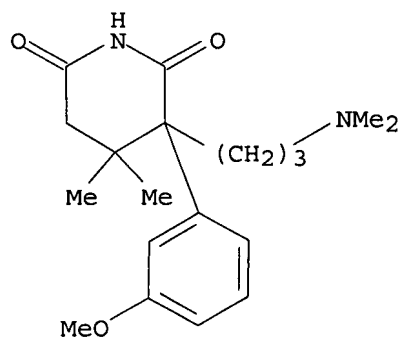
L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, hydrochloride (9CI)  
 MF C19 H28 N2 O3 . x Cl H



● x HCl

L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, monohydrochloride, (-)- (9CI)  
 MF C19 H28 N2 O3 . Cl H

Rotation (-).

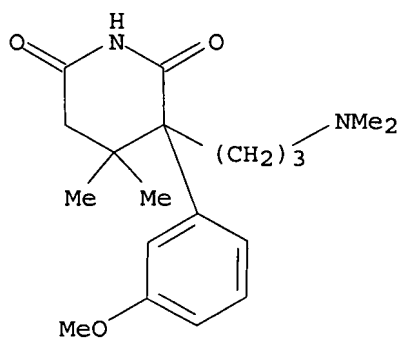


● HCl

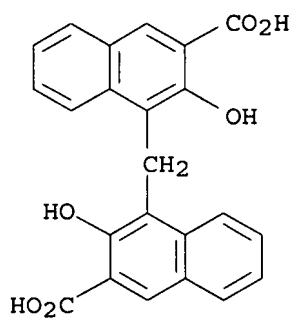
L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2-Naphthalenecarboxylic acid, 4,4'-methylenebis[3-hydroxy-, compd. with (-)-3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-2,6-piperidinedione (1:1) (9CI)  
 MF C23 H16 O6 . C19 H28 N2 O3

CM 1

Rotation (-).

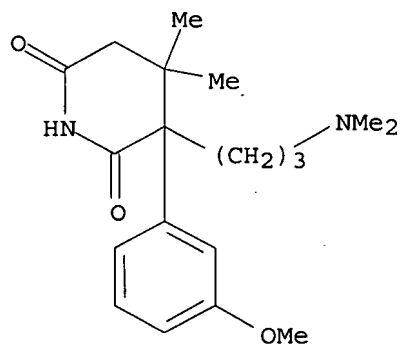


CM 2



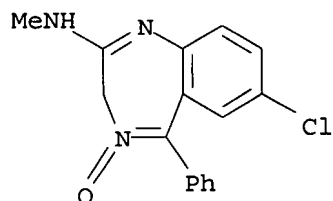
L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, monohydrochloride, mixt. with 7-chloro-N-methyl-5-phenyl-3H-1,4-benzodiazepin-2-amine 4-oxide, monohydrochloride (9CI)  
 MF C19 H28 N2 O3 . C16 H14 Cl N3 O . 2 Cl H  
 CI MXS

CM 1



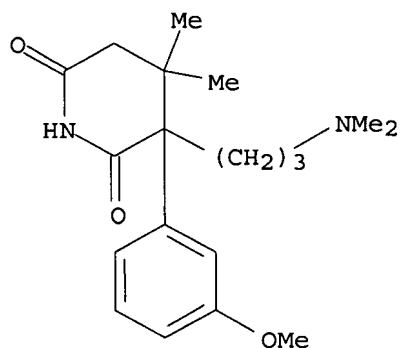
● HCl

CM 2



● HCl

L8 13 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-  
 dimethyl-, hydrochloride (1:1)  
 MF C19 H28 N2 O3 . Cl H  
 CI COM



● HCl

ALL ANSWERS HAVE BEEN SCANNED

=> FILE REG

|                      |            |         |
|----------------------|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL   |
|                      | ENTRY      | SESSION |
| FULL ESTIMATED COST  | 68.15      | 108.49  |

FILE 'REGISTRY' ENTERED AT 11:04:17 ON 15 NOV 2007  
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STRUCTURE FILE UPDATES: 14 NOV 2007 HIGHEST RN 953817-57-7  
 DICTIONARY FILE UPDATES: 14 NOV 2007 HIGHEST RN 953817-57-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when  
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REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> STR 117576-37-1

WARNING. STEREO DATA NOT INCLUDED IN MODEL (NOT SEARCHABLE)  
:END

L9 STRUCTURE CREATED

=> S L9 FAM FUL

FULL SEARCH INITIATED 11:04:21 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 20 TO ITERATE

100.0% PROCESSED 20 ITERATIONS 13 ANSWERS  
SEARCH TIME: 00.00.01

L10 13 SEA FAM FUL L9

(FILE 'HOME' ENTERED AT 10:55:56 ON 15 NOV 2007)

FILE 'REGISTRY' ENTERED AT 10:57:19 ON 15 NOV 2007

L1 1 S AGN 2979/CN

FILE 'CAPLUS' ENTERED AT 10:57:57 ON 15 NOV 2007

FILE 'REGISTRY' ENTERED AT 10:58:12 ON 15 NOV 2007

L2 1 S 53873-28-2  
L3 1 S 117539-17-0  
L4 1376 S C19 H28 N2 O3/MF  
L5 277 S L4 AND PIPERIDIN?  
L6 4 S L5 AND PIPERIDINEDIONE

FILE 'REGISTRY' ENTERED AT 11:02:53 ON 15 NOV 2007

L7 STR 732209-36-8  
L8 13 S L7 FAM FUL

FILE 'REGISTRY' ENTERED AT 11:04:17 ON 15 NOV 2007

L9 STR 117576-37-1  
L10 13 S L9 FAM FUL

=> fil caplus

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |
| 68.15      | 176.64  |

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 11:05:30 ON 15 NOV 2007

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FILE COVERS 1907 - 15 Nov 2007 VOL 147 ISS 21

FILE LAST UPDATED: 14 Nov 2007 (20071114/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l10

L11 19 L10

=> s l1

L12 15 L1

=> s l11 not l12

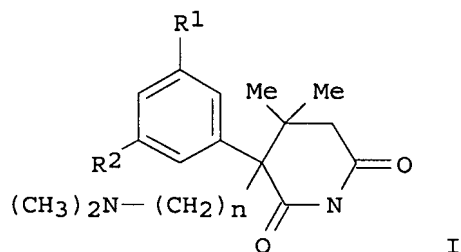
L13 4 L11 NOT L12

=> d bib abs hitstr 1-4

L13 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:182707 CAPLUS  
 DN 140:210809  
 TI Piperidin-2,6-dione pamoate salts for the treatment of stress-related  
 affective disorders, and pharmaceutical compositions containing them  
 IN Wermuth, Camille Georges  
 PA Prestwick Pharmaceuticals, Inc., USA  
 SO PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | WO 2004017970   | A1   | 20040304 | WO 2003-IB3698  | 20030818 |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |          |
|      | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |
|      | CA 2495377  | A1   | 20040304 | CA 2003-2495377 | 20030818 |
|      | AU 2003255947   | A1   | 20040311 | AU 2003-255947  | 20030818 |
|      | EP 1539160  | A1   | 20050615 | EP 2003-792588  | 20030818 |
|      | EP 1539160  | B1   | 20060621 |                 |          |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                 |          |
|      | BR 2003013674   | A    | 20050621 | BR 2003-13674   | 20030818 |
|      | CN 1678316  | A    | 20051005 | CN 2003-819914  | 20030818 |
|      | JP 2005538146   | T    | 20051215 | JP 2004-530467  | 20030818 |
|      | AT 330605   | T    | 20060715 | AT 2003-792588  | 20030818 |
|      | NZ 538341   | A    | 20060929 | NZ 2003-538341  | 20030818 |
|      | PT 1539160  | T    | 20061031 | PT 2003-792588  | 20030818 |
|      | ES 2268474  | T3   | 20070316 | ES 2003-3792588 | 20030818 |
|      | US 2006025443   | A1   | 20060202 | US 2005-524693  | 20050215 |
|      | MX 2005PA01919  | A    | 20050603 | MX 2005-PA1919  | 20050217 |
|      | IN 2005CN00223  | A    | 20070907 | IN 2005-CN223   | 20050221 |
|      | NO 2005001471   | A    | 20050523 | NO 2005-1471    | 20050321 |
| PRAI | GB 2002-19639   | A    | 20020822 |                 |          |
|      | WO 2003-IB3698  | W    | 20030818 |                 |          |
| OS   | MARPAT 140:210809   |      |          |                 |          |
| GI   |   |      |          |                 |          |



AB Pamoate salts of certain 3-phenyl-3-dimethylaminoalkyl-4,4-dimethylpiperidin-2,6-diones, (I) (R1 = MeO, EthO, OH; R2 = MeO, EthO, OH; n = 2, 3) and pharmacol. acceptable solvates thereof are devoid of the weight loss and hepatocyte changes in the rat which limited to marginally effective levels the permitted clin. doses of the corresponding

hydrochlorides in the treatment or prophylaxis of stress-related affective disorders such as anxiety, depression, migraine and sleep apnea. The preferred pamoate salts are 3-(3,5dimethoxyphenyl)-3-(3-dimethylaminopropyl)-4,4-dimethylpiperidine-2,6-dione pamoate and, especially, 3-(3-methoxyphenyl)-3-(3-dimethylaminopropyl)-4,4-dimethylpiperidine-2,6-dione pamoate.

IT 666175-71-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(piperidin-2,6-dione pamoate salts for treatment of stress-related affective disorders, and pharmaceutical compns. containing them)

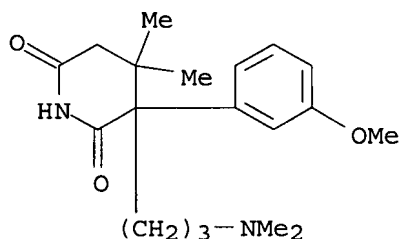
RN 666175-71-9 CAPLUS

CN 2-Naphthalenecarboxylic acid, 4,4'-methylenebis[3-hydroxy-, compd. with 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-2,6-piperidinedione (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 53873-21-5

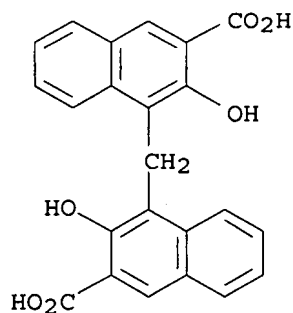
CMF C19 H28 N2 O3



CM 2

CRN 130-85-8

CMF C23 H16 O6



IT 666175-73-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(piperidin-2,6-dione pamoate salts for treatment of stress-related affective disorders, and pharmaceutical compns. containing them)

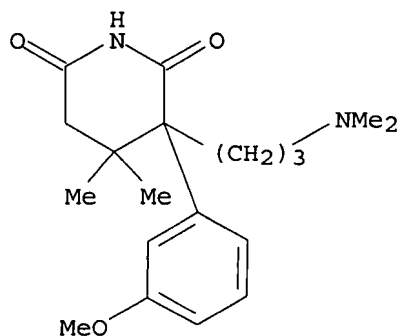
RN 666175-73-1 CAPLUS

CN 2-Naphthalenecarboxylic acid, 4,4'-methylenebis[3-hydroxy-, compd. with (-)-3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-2,6-piperidinedione (1:1) (9CI) (CA INDEX NAME)

CM 1

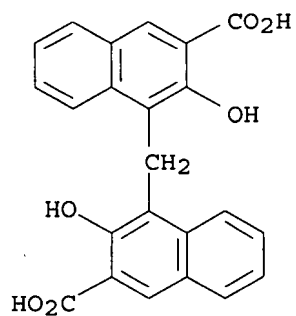
CRN 117576-37-1  
CMF C19 H28 N2 O3

Rotation (-).



CM 2

CRN 130-85-8  
CMF C23 H16 O6



IT 500350-77-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

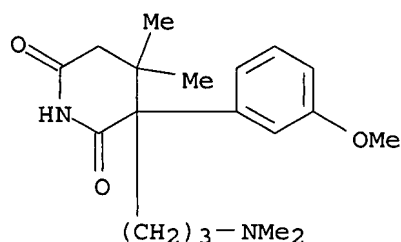
(piperidin-2,6-dione pamoate salts for treatment of stress-related affective disorders, and pharmaceutical compns. containing them)

RN 500350-77-6 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, sulfate (1:1) (CA INDEX NAME)

CM 1

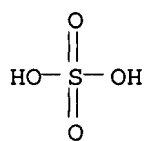
CRN 53873-21-5  
CMF C19 H28 N2 O3



CM 2

CRN 7664-93-9

CMF H2 O4 S



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:174547 CAPLUS

DN 138:204953

TI Preparation of piperidine-2,6-dione bisulfate salts useful for the  
treatment of stress-related affective disorders

IN Gittos, Maurice Ward

PA Fr.

SO Brit. UK Pat. Appl., 26 pp.

CODEN: BAXXDU

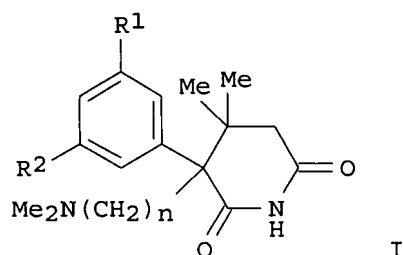
DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---|------|----------|-----------------|----------|
| PI | GB 2379216  | A    | 20030305 | GB 2001-20821   | 20010828 |
|    | CA 2459009  | A1   | 20030313 | CA 2002-2459009 | 20020822 |
|    | WO 2003020275   | A1   | 20030313 | WO 2002-GB3869  | 20020822 |
|    | W:  |      |          |                 |          |
|    | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, |      |          |                 |          |
|    | CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, |      |          |                 |          |
|    | GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, |      |          |                 |          |
|    | LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, |      |          |                 |          |
|    | PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, |      |          |                 |          |
|    | UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW                          |      |          |                 |          |
|    | RW:   |      |          |                 |          |
|    | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, |      |          |                 |          |
|    | CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, |      |          |                 |          |
|    | PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, |      |          |                 |          |
|    | NE, SN, TD, TG  |      |          |                 |          |
|    | AU 2002321522   | A1   | 20030318 | AU 2002-321522  | 20020822 |
|    | EP 1420788  | A1   | 20040526 | EP 2002-755226  | 20020822 |
|    | EP 1420788  | B1   | 20061213 |                 |          |
|    | R:  |      |          |                 |          |
|    | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, |      |          |                 |          |
|    | IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK          |      |          |                 |          |
|    | BR 2002012175   | A    | 20040720 | BR 2002-12175   | 20020822 |
|    | CN 1549715  | A    | 20041124 | CN 2002-816912  | 20020822 |
|    | JP 2005502677   | T    | 20050127 | JP 2003-524582  | 20020822 |
|    | NZ 531345   | A    | 20050729 | NZ 2002-531345  | 20020822 |

|                      |    |          |                 |          |
|----------------------|----|----------|-----------------|----------|
| AT 347891            | T  | 20070115 | AT 2002-755226  | 20020822 |
| ES 2275898           | T3 | 20070616 | ES 2002-2755226 | 20020822 |
| MX 2004PA01777       | A  | 20041122 | MX 2004-PA1777  | 20040225 |
| US 2004249159        | A1 | 20041209 | US 2004-486925  | 20040225 |
| US 7189742           | B2 | 20070313 |                 |          |
| IN 2004MN00151       | A  | 20050624 | IN 2004-MN151   | 20040227 |
| PRAI GB 2001-20821   | A  | 20010828 |                 |          |
| WO 2002-GB3869       | W  | 20020822 |                 |          |
| OS MARPAT 138:204953 |    |          |                 |          |
| GI                   |    |          |                 |          |



AB Title compds. [I; R1 = MeO, EtO, OH; R2 = H, R1; n = 2, 3], were prepared Thus, a cooled solution of H2SO4 in EtOH was mixed into 3-(3-methoxyphenyl)-3-(3-dimethylaminopropyl)-4,4-dimethylpiperidine-2,6-dione (AGN 2979) in EtOH followed by removal of solvent under reduced pressure and recrystn. from EtOH to give the bisulfate (II). II at 65 mg every 2 days in a 90 kg human male eliminated episodes of obstructive sleep apnea. II drug formulations are given. I are devoid of the weight loss and hepatocyte changes in the rat which limited to marginally effective levels the permitted clin. doses of the corresponding hydrochlorides in the treatment or prophylaxis of stress-related affective disorders such as anxiety, depression, migraine and sleep apnea.

IT 500350-77-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine-2,6-dione bisulfate salts useful for the treatment of stress-related affective disorders)

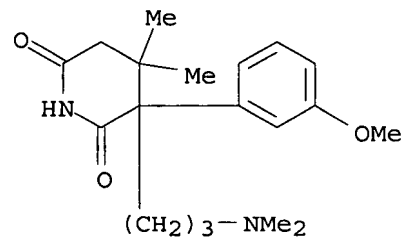
RN 500350-77-6 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, sulfate (1:1) (CA INDEX NAME)

CM 1

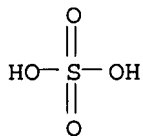
CRN 53873-21-5

CMF C19 H28 N2 O3



CM 2

CRN 7664-93-9  
CMF H2 O4 S

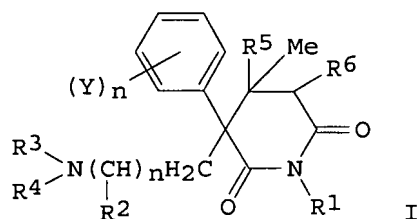


RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1989:580731 CAPLUS  
DN 111:180731  
TI Anxiolytic pharmaceuticals containing 3-phenyl-3-(aminoalkyl)-4-methyl-2,6-dioxopiperidine derivatives  
IN Costall, Brenda  
PA National Research Development Corp., UK  
SO Brit. UK Pat. Appl., 45 pp.  
CODEN: BAXXDU  
DT Patent  
LA English

FAN.CNT 1

|      | PATENT NO.                                    | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
|      | -----   | ---- | -----    | -----           | -----    |
| PI   | GB 2206491                                    | A    | 19890111 | GB 1988-16214   | 19880707 |
|      | GB 2206491                                    | B    | 19910123 |                 |          |
|      | EP 299680                                     | A2   | 19890118 | EP 1988-306208  | 19880707 |
|      | EP 299680                                     | A3   | 19890726 |                 |          |
|      | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE |      |          |                 |          |
|      | DK 8803826                                    | A    | 19890111 | DK 1988-3826    | 19880708 |
|      | AU 8818862                                    | A    | 19890112 | AU 1988-18862   | 19880708 |
|      | AU 609496                                     | B2   | 19910502 |                 |          |
|      | JP 01063517                                   | A    | 19890309 | JP 1988-173621  | 19880711 |
|      | ZA 8804986                                    | A    | 19900328 | ZA 1988-4986    | 19880711 |
| PRAI | GB 1987-16338                                 | A    | 19870710 |                 |          |
| OS   | MARPAT 111:180731                             |      |          |                 |          |
| GI   |   |      |          |                 |          |



AB 3-Phenyl-3-aminoalkyl-4-methyl-2,6-dioxopiperidine derivs. (I; R1 = H, alkyl; n = 1, 2; R2 = H, Me, provided that one of R2 = H if n = 2; R3 = H, alkyl; R4 = alkyl; R5, R6 = H, Me; m = 0-3; each Y is in a meta or para position and represents OH, alkoxy, alkyl, hydroxyalkyl, halo, CF3, provided that OH and alkoxy are not in the para position) or their salts antagonize angiogenesis associated with the withdrawal of addictive drugs, especially alc., nicotine, and cocaine. Tablets contained  
3-(3'-methoxyphenyl)-  
3-(3"-N,N-dimethylaminopropyl)-4,4-dimethyl-2,6-dioxopiperidine (II)

(base) 1, lactose 51.5, dried maize starch 45, and Mg stearate 1.5 mg/tablet. Mice were exposed to 8% alc. in the drinking water and during alc. withdrawal they received 10 mg diazepam/kg i.p. or 0.5 mg II/kg i.p. The mice were previously kept in a darkened box and during testing placed in a test area with white and black areas; during alc. intake the mice showed anxiolysis characterized by increased exploratory behavior in the white section and when the alc. was withdrawn the reverse profile was observed. Both diazepam and II not only reversed anxiogenesis but actually led to anxiolysis; both appeared to be equieffective to combat anxiogenesis in alc. withdrawal, but II was more potent and devoid of the initial sedative action seen on treatment with diazepam. Both II and diazepam antagonized anxiogenesis in cocaine withdrawal in mice or in nicotine withdrawal in marmosets. I had no action on benzodiazepine receptors.

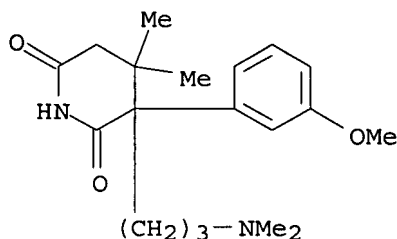
IT 53873-21-5 117576-37-1 123323-80-8

RL: BIOL (Biological study)

(as anxiolytic, for treatment of anxiogenesis associated with addictive drug withdrawal)

RN 53873-21-5 CAPLUS

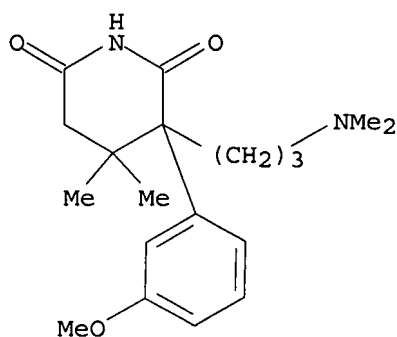
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



RN 117576-37-1 CAPLUS

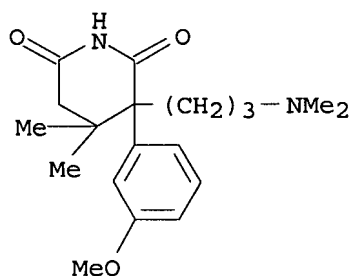
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

Rotation (-).



RN 123323-80-8 CAPLUS

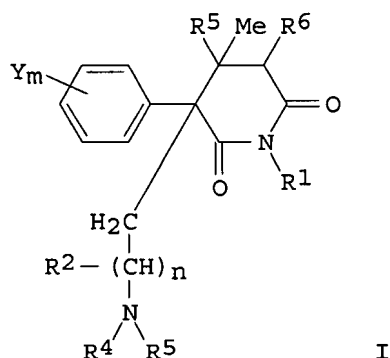
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



● x HCl

L13 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1989:546823 CAPLUS  
 DN 111:146823  
 TI Phenyl-3-aminoalkyl-4-methyl-2,6-dioxopiperidine derivatives and their use  
 as antipsychotic agents  
 IN Costall, Brenda  
 PA National Research Development Corp., UK  
 SO Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

|      | PATENT NO.                                    | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | EP 298738                                     | A2   | 19890111 | EP 1988-306207  | 19880707 |
|      | EP 298738                                     | A3   | 19890809 |                 |          |
|      | EP 298738                                     | B1   | 19920930 |                 |          |
|      | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE |      |          |                 |          |
|      | GB 2206490                                    | A    | 19890111 | GB 1988-16213   | 19880707 |
|      | GB 2206490                                    | B    | 19910918 |                 |          |
|      | AT 81003                                      | T    | 19921015 | AT 1988-306207  | 19880707 |
|      | DK 8803825                                    | A    | 19890111 | DK 1988-3825    | 19880708 |
|      | DK 170360                                     | B1   | 19950814 |                 |          |
|      | AU 8818861                                    | A    | 19890127 | AU 1988-18861   | 19880708 |
|      | AU 606701                                     | B2   | 19910214 |                 |          |
|      | ZA 8804937                                    | A    | 19900328 | ZA 1988-4937    | 19880708 |
|      | JP 01063516                                   | A    | 19890309 | JP 1988-173620  | 19880711 |
|      | US 4877800                                    | A    | 19891031 | US 1988-217450  | 19880711 |
|      | CA 1328077                                    | C    | 19940329 | CA 1988-571649  | 19880711 |
| PRAI | GB 1987-16337                                 | A    | 19870710 |                 |          |
|      | EP 1988-306207                                | A    | 19880707 |                 |          |
| OS   | MARPAT 111:146823                             |      |          |                 |          |
| GI   |   |      |          |                 |          |



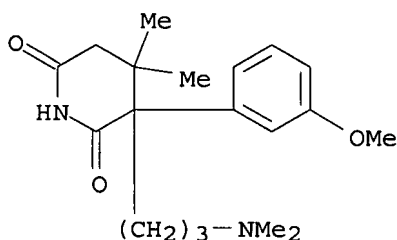
AB Phenyl-3-aminoalkyl-4-methyl-2,6-dioxopiperidine derivs. (I; R1, R3 = H, alkyl; n = 1,2; R2 = H, Me, provided that R2 = H when n = 2; R4 = alkyl; R5,R6 = H, Me; m = 0-3; Y is in a meta- or para-position; Y = OH, alkoxy, alkyl, hydroxyalkyl, halo, CF3, provided that OH and alkoxy are not in the para-position) or its salts are used for the manufacture of pharmaceuticals used in the treatment of psychosis. Hyperactivity was induced in rats via stereotaxic surgery, i.e. implantation of cannulae for intracerebral infusion of dopamine into the center of the nucleus accumbens and 25 µg dopamine was thus infused over a 24 h time period. Dopamine-induced hyperactivity occurred in a biphasic pattern between days 2-5 and 9-12 of treatment and could be antagonized with 0.01-10 mg/kg i.p. doses of 3-(3'-methoxyphenyl)-3-(3''-N,N-dimethylaminopropyl)-4,4-dimethyl-2,6-dioxopiperidine (II); a lower dose of II (0.00001 mg/kg) controlled the 2nd peak but prevented control of the 1st peak. After withdrawal of II and dopamine a rebound of hyperactivity was not observed; persistent or excessive motor depression was not observed either with II during treatment. Fluphenazine at a 0.025-0.05 mg/kg dose was also effective in controlling dopamine-induced hyperactivity, however, after withdrawal, a rebound activity was observed. Tablets contained II 1, lactose 51.5, dried maize starch 45, and Mg stearate 1.5 mg each.

IT 53873-21-5 117576-37-1

RL: BIOL (Biological study)  
(antipsychotic agent)

RN 53873-21-5 CAPLUS

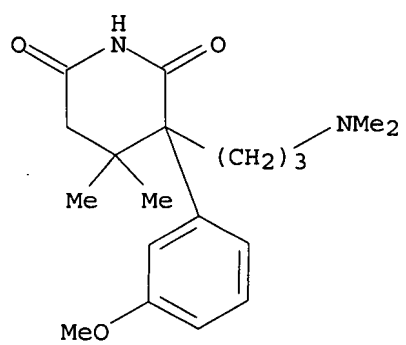
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



RN 117576-37-1 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

Rotation (-).



=> s 666175-74-2 or 53873-21-5 or 92519-16-9 or 117576-37-1

1 666175-74-2  
(666175-74-2/RN)

1 53873-21-5  
(53873-21-5/RN)

1 92519-16-9  
(92519-16-9/RN)

1 117576-37-1  
(117576-37-1/RN)

L4 4 666175-74-2 OR 53873-21-5 OR 92519-16-9 OR 117576-37-1

=> d 14

L4 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN

RN 666175-74-2 REGISTRY

ED Entered STN: 22 Mar 2004

CN 2,6-Piperidinedione, 3-(3,5-dimethoxyphenyl)-3-[3-(dimethylamino)propyl]-4,4-dimethyl-, (-)- (CA INDEX NAME)

FS STEREOSEARCH

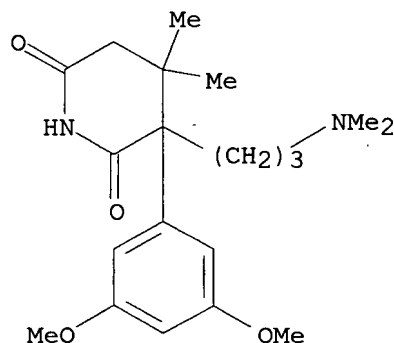
MF C20 H30 N2 O4

CI COM

SR CA

LC STN Files: CA, CAPLUS

Rotation (-).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L4 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN

RN 117576-37-1 REGISTRY

ED Entered STN: 18 Nov 1988

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

FS STEREOSEARCH

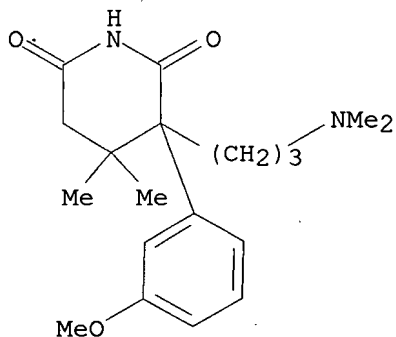
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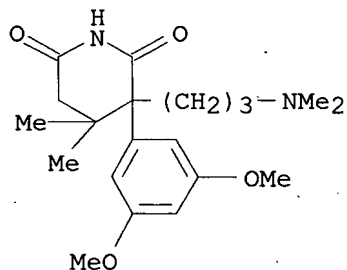
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

6 REFERENCES IN FILE CA (1907 TO DATE)  
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 92519-16-9 REGISTRY  
ED Entered STN: 17 Dec 1984  
CN 2,6-Piperidinedione, 3-(3,5-dimethoxyphenyl)-3-[3-(dimethylamino)propyl]-  
4,4-dimethyl- (CA INDEX NAME)  
MF C20 H30 N2 O4  
CI COM  
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

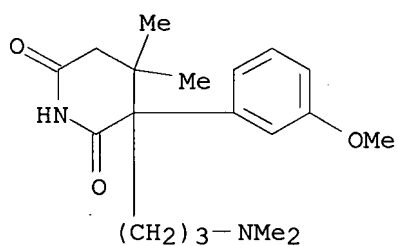


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4 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 53873-21-5 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-  
dimethyl- (CA INDEX NAME)  
OTHER NAMES:  
CN 3-[3-(Dimethylamino)propyl]-3-(m-methoxyphenyl)-4,4-dimethyl-2,6-  
piperidinedione  
DR 117539-16-9  
MF C19 H28 N2 O3  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, MEDLINE,

PHAR, PROUSDDR, RTECS\*, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11 REFERENCES IN FILE CA (1907 TO DATE)  
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> s 15 and weight

150877 WEIGHT

L6 0 L5 AND WEIGHT

=> d bib abs hitstr 15 1-12

L5 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2007:329586 CAPLUS

DN 146:330838

TI 4,4-Dimethylpiperidine-2,6-dione derivatives for use in the treatment of hypertension

IN Gittos, Maurice Ward

PA Prestwick Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 20pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
|----|---------------|--|----------|-----------------|----------|
| PI | WO 2007031737 | A1   | 20070322 | WO 2006-GB3379  | 20060913 |
|    | W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW |          |                 |          |
|    | RW:           | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM   |          |                 |          |

PRAI GB 2005-18763 A 20050914

OS MARPAT 146:330838

AB Hypertension is treated with certain 3-phenyl-3-dimethylaminoalkyl-4,4-dimethylpiperidin-2,6-diones. The preferred compds. are 3(3,5-dimethoxyphenyl)-3-(3-dimethylaminopropyl)-4,4-dimethylpiperidine-2,6-dione salts and, especially, 3(3-methoxyphenyl)-3-(3-dimethylaminopropyl)-4,4-dimethylpiperidine-2,6-dione salts.

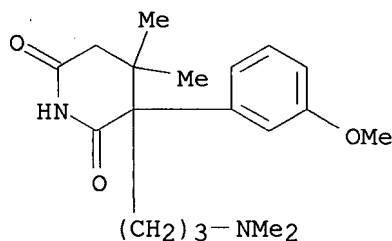
IT 53873-21-5 92519-16-9 117576-37-1 666175-74-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dimethylpiperidinedione derivs. for treatment of hypertension)

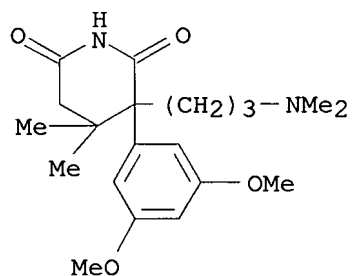
RN 53873-21-5 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



RN 92519-16-9 CAPLUS

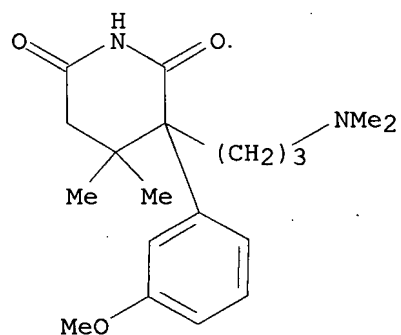
CN 2,6-Piperidinedione, 3-(3,5-dimethoxyphenyl)-3-[3-(dimethylamino)propyl]-4,4-dimethyl- (CA INDEX NAME)



RN 117576-37-1 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

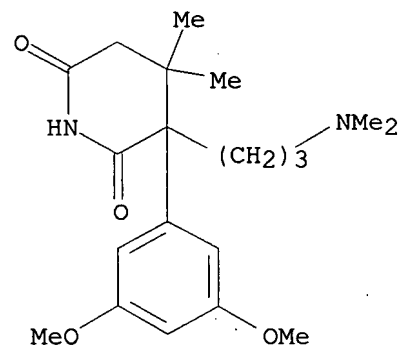
Rotation (-).



RN 666175-74-2 CAPLUS

CN 2,6-Piperidinedione, 3-(3,5-dimethoxyphenyl)-3-[3-(dimethylamino)propyl]-4,4-dimethyl-, (-)- (CA INDEX NAME)

Rotation (-).

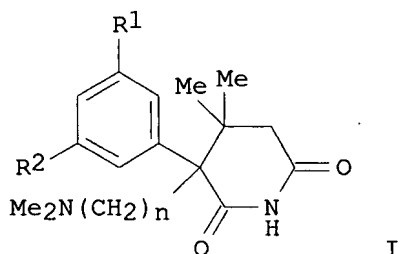


RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2003:174547 CAPLUS

DN 138:204953  
 TI Preparation of piperidine-2,6-dione bisulfate salts useful for the  
 treatment of stress-related affective disorders  
 IN Gittos, Maurice Ward  
 PA Fr.  
 SO Brit. UK Pat. Appl., 26 pp.  
 CODEN: BAXXDU  
 DT Patent  
 LA English  
 FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | GB 2379216  | A    | 20030305 | GB 2001-20821   | 20010828 |
|      | CA 2459009  | A1   | 20030313 | CA 2002-2459009 | 20020822 |
|      | WO 2003020275   | A1   | 20030313 | WO 2002-GB3869  | 20020822 |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |          |
|      | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |
|      | AU 2002321522   | A1   | 20030318 | AU 2002-321522  | 20020822 |
|      | EP 1420788  | A1   | 20040526 | EP 2002-755226  | 20020822 |
|      | EP 1420788  | B1   | 20061213 |                 |          |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK   |      |          |                 |          |
|      | BR 2002012175   | A    | 20040720 | BR 2002-12175   | 20020822 |
|      | CN 1549715  | A    | 20041124 | CN 2002-816912  | 20020822 |
|      | JP 2005502677   | T    | 20050127 | JP 2003-524582  | 20020822 |
|      | NZ 531345   | A    | 20050729 | NZ 2002-531345  | 20020822 |
|      | AT 347891   | T    | 20070115 | AT 2002-755226  | 20020822 |
|      | ES 2275898  | T3   | 20070616 | ES 2002-2755226 | 20020822 |
|      | MX 2004PA01777  | A    | 20041122 | MX 2004-PA1777  | 20040225 |
|      | US 2004249159   | A1   | 20041209 | US 2004-486925  | 20040225 |
|      | US 7189742  | B2   | 20070313 |                 |          |
|      | IN 2004MN00151  | A    | 20050624 | IN 2004-MN151   | 20040227 |
| PRAI | GB 2001-20821   | A    | 20010828 |                 |          |
|      | WO 2002-GB3869  | W    | 20020822 |                 |          |
| OS   | MARPAT 138:204953   |      |          |                 |          |
| GI   |   |      |          |                 |          |



AB Title compds. [I; R1 = MeO, EtO, OH; R2 = H, R1; n = 2, 3], were prepared  
 Thus, a cooled solution of H2SO4 in EtOH was mixed into 3-(3-methoxyphenyl)-3-(3-dimethylaminopropyl)-4,4-dimethylpiperidine-2,6-dione (AGN 2979) in EtOH followed by removal of solvent under reduced pressure and recrystn.

from EtOH to give the bisulfate (II). II at 65 mg every 2 days in a 90 kg human male eliminated episodes of obstructive sleep apnea. II drug formulations are given. I are devoid of the weight loss and hepatocyte changes in the rat which limited to marginally effective levels the permitted clin. doses of the corresponding hydrochlorides in the treatment or prophylaxis of stress-related affective disorders such as anxiety, depression, migraine and sleep apnea.

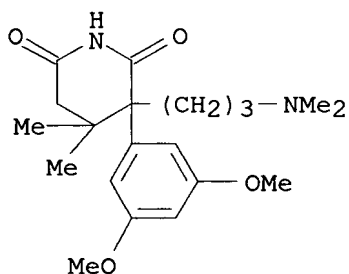
IT 92519-16-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of piperidine-2,6-dione bisulfate salts useful for the treatment of stress-related affective disorders)

RN 92519-16-9 CAPLUS

CN 2,6-Piperidinedione, 3-(3,5-dimethoxyphenyl)-3-[3-(dimethylamino)propyl]-4,4-dimethyl- (CA INDEX NAME)



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1992:106095 CAPLUS

DN 116:106095

TI Process for preparation of 3-aryl-3-aminoalkyl-2,6-dioxohexahydropyridines  
IN Dygos, John Henry; McLaughlin, Kathleen Therese; Ng, John Sau Hoi; Paul, Kalidas

PA G.D. Searle and Co., USA

SO Eur. Pat. Appl., 15 pp.

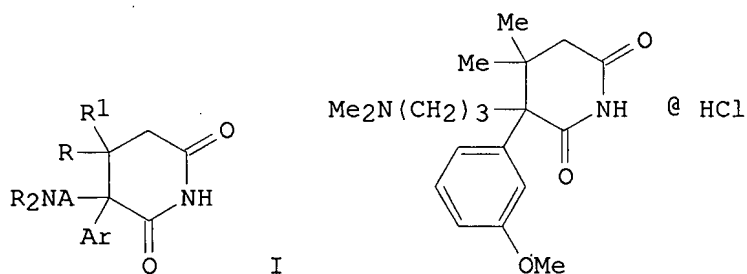
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | EP 448972   | A2   | 19911002 | EP 1991-102833  | 19910226 |
|      | EP 448972   | A3   | 19920506 |                 |          |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE |      |          |                 |          |
|      | US 5104990  | A    | 19920414 | US 1990-486027  | 19900227 |
|      | CA 2036968  | A1   | 19910828 | CA 1991-2036968 | 19910225 |
|      | JP 04211657   | A    | 19920803 | JP 1991-30929   | 19910226 |
|      | JP 06094460   | B    | 19941124 |                 |          |
|      | US 5220019  | A    | 19930615 | US 1992-859189  | 19920327 |
| PRAI | US 1990-486027  | A    | 19900227 |                 |          |
| OS   | CASREACT 116:106095; MARPAT 116:106095                    |      |          |                 |          |
| GI   |   |      |          |                 |          |



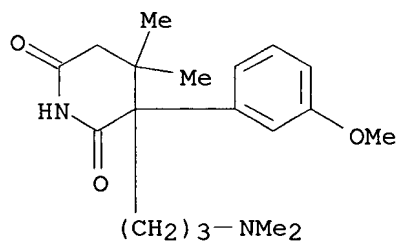
AB A process is disclosed for the preparation of title compds. I [A = straight or branched C2-6 alkalene; R, R1 = C1-10 alkyl; Ar = heterocyclyl, (substituted) aryl] and particularly 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-2,6-piperidinedione monohydrochloride (II), which is useful as an antidepressant. Thus, 6.58 Kg [(dimethylamino)propyl]methoxybenzeneacetonitrile, preparation given from 3-MeOC6H4CH2CN and Cl(CH2)3NMe2.HCl, was treated with 11.89 Kg of (Me2CH)2CHLi and then 6.25 Kg Me2C:C(CO2Et)2 in THF-heptane to give 84.69% 3-MeOC6H4C(CN)[CMe2CH(CO2Et)2](CH2)3NMe2.HCl. Hydrolysis of the latter compound in refluxing 96% H2SO4 and then treatment with 29% NH4OH followed by 36% aq HCl in EtOH gave 83.5% II.

IT 53873-21-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 53873-21-5 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



L5 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1991:609 CAPLUS

DN 114:609

TI Low-dosage anxiolytic compositions containing dioxopiperidine derivatives

IN Costall, Brenda

PA National Research Development Corp., UK

SO S. African, 56 pp.

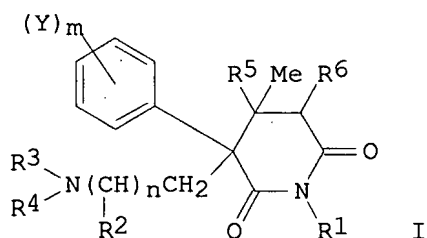
CODEN: SFXXAB

DT Patent

LA English

FAN.CNT 1

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | ZA 8804938     | A    | 19900328 | ZA 1988-4938    | 19880708 |
|      | IL 87059       | A    | 19921201 | IL 1988-87059   | 19880710 |
| PRAI | GB 1987-16340  | A    | 19870710 |                 |          |
| OS   | MARPAT 114:609 |      |          |                 |          |
| GI   |                |      |          |                 |          |



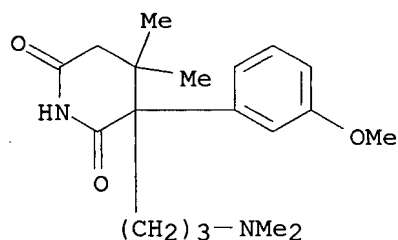
AB Dioxopiperidine derivs. I [R1 = H, C1-4 alkyl; R2 = H, Me, provided that one R2 = H when n = 2; n = 1,2; R3 = H, C1-2 alkyl; R4 = C1-2 alkyl; R5, R6 = H, Me; m = 0-3; Y = OH, C1-2 alkoxy, C1-2 (hydroxy)alkyl, halo, trifluoromethyl in a meta or para position, provided that OH and alkoxy are not in the para position] or pharmaceutically acceptable salts are low-dosage anxiolytics; pharmaceutical compns. comprise I at 10-7-10-1 mg/unit dose. 3-(3'-Methoxyphenyl)-3-(3''-N,N-dimethylethylaminopropyl)-4,4-dimethyl-2,6-dioxopiperidine (II) at 0.00001-100.0 mg/kg s.c. showed anxiolytic activity in male albino BKW mice. The effect was achieved in the absence of sedation. Tablets comprise II 0.1, lactose 51.5, maize starch 45, and Mg stearate 1.5 mg/tablet.

IT 53873-21-5 117576-37-1

RL: BIOL (Biological study)  
(low-dosage anxiolytic)

RN 53873-21-5 CAPLUS

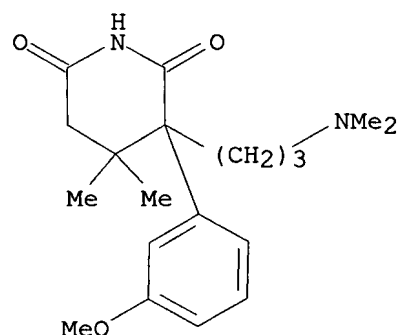
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



RN 117576-37-1 CAPLUS

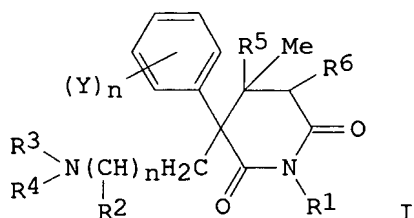
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

Rotation (-).



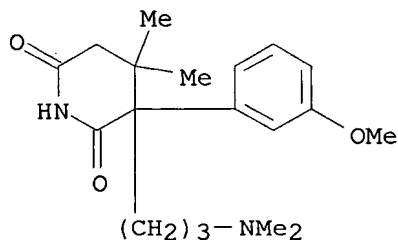
AN 1989:580731 CAPLUS  
 DN 111:180731  
 TI Anxiolytic pharmaceuticals containing 3-phenyl-3-(aminoalkyl)-4-methyl-2,6-dioxopiperidine derivatives  
 IN Costall, Brenda  
 PA National Research Development Corp., UK  
 SO Brit. UK Pat. Appl., 45 pp.  
 CODEN: BAXXDU  
 DT Patent  
 LA English  
 FAN.CNT 1

|      | PATENT NO.                                    | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | GB 2206491                                    | A    | 19890111 | GB 1988-16214   | 19880707 |
|      | GB 2206491                                    | B    | 19910123 |                 |          |
|      | EP 299680                                     | A2   | 19890118 | EP 1988-306208  | 19880707 |
|      | EP 299680                                     | A3   | 19890726 |                 |          |
|      | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE |      |          |                 |          |
|      | DK 8803826                                    | A    | 19890111 | DK 1988-3826    | 19880708 |
|      | AU 8818862                                    | A    | 19890112 | AU 1988-18862   | 19880708 |
|      | AU 609496                                     | B2   | 19910502 |                 |          |
|      | JP 01063517                                   | A    | 19890309 | JP 1988-173621  | 19880711 |
|      | ZA 8804986                                    | A    | 19900328 | ZA 1988-4986    | 19880711 |
| PRAI | GB 1987-16338                                 | A    | 19870710 |                 |          |
| OS   | MARPAT 111:180731                             |      |          |                 |          |
| GI   |   |      |          |                 |          |



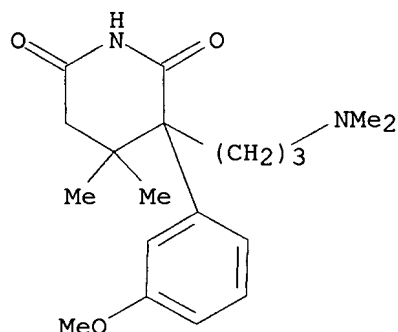
AB 3-Phenyl-3-aminoalkyl-4-methyl-2,6-dioxopiperidine derivs. (I; R1 = H, alkyl; n = 1, 2; R2 = H, Me, provided that one of R2 = H if n = 2; R3 = H, alkyl; R4 = alkyl; R5, R6 = H, Me; m = 0-3; each Y is in a meta or para position and represents OH, alkoxy, alkyl, hydroxyalkyl, halo, CF3, provided that OH and alkoxy are not in the para position) or their salts antagonize anxiogenesis associated with the withdrawal of addictive drugs, especially alc., nicotine, and cocaine. Tablets contained 3-(3'-methoxyphenyl)-3-(3"-N,N-dimethylaminopropyl)-4,4-dimethyl-2,6-dioxopiperidine (II) (base) 1, lactose 51.5, dried maize starch 45, and Mg stearate 1.5 mg/tablet. Mice were exposed to 8% alc. in the drinking water and during alc. withdrawal they received 10 mg diazepam/kg i.p. or 0.5 mg II/kg i.p. The mice were previously kept in a darkened box and during testing placed in a test area with white and black areas; during alc. intake the mice showed anxiolysis characterized by increased exploratory behavior in the white section and when the alc. was withdrawn the reverse profile was observed. Both diazepam and II not only reversed anxiogenesis but actually led to anxiolysis; both appeared to be equieffective to combat anxiogenesis in alc. withdrawal, but II was more potent and devoid of the initial sedative action seen on treatment with diazepam. Both II and diazepam antagonized anxiogenesis in cocaine withdrawal in mice or in nicotine withdrawal in marmosets. I had no action on benzodiazepine receptors.

IT 53873-21-5 117576-37-1  
 RL: BIOL (Biological study)  
 (as anxiolytic, for treatment of anxiogenesis associated with addictive drug withdrawal)  
 RN 53873-21-5 CAPLUS  
 CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



RN 117576-37-1 CAPLUS  
 CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

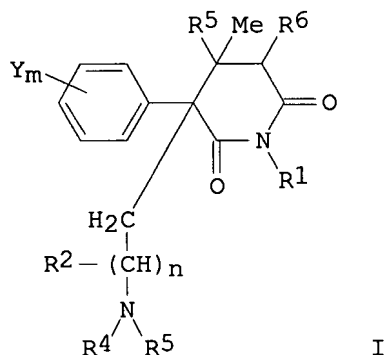
Rotation (-).



L5 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1989:546823 CAPLUS  
 DN 111:146823  
 TI Phenyl-3-aminoalkyl-4-methyl-2,6-dioxopiperidine derivatives and their use as antipsychotic agents  
 IN Costall, Brenda  
 PA National Research Development Corp., UK  
 SO Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

|    | PATENT NO.                                    | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---|------|----------|-----------------|----------|
| PI | EP 298738                                     | A2   | 19890111 | EP 1988-306207  | 19880707 |
|    | EP 298738                                     | A3   | 19890809 |                 |          |
|    | EP 298738                                     | B1   | 19920930 |                 |          |
|    | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE |      |          |                 |          |
|    | GB 2206490                                    | A    | 19890111 | GB 1988-16213   | 19880707 |
|    | GB 2206490                                    | B    | 19910918 |                 |          |
|    | AT 81003                                      | T    | 19921015 | AT 1988-306207  | 19880707 |
|    | DK 8803825                                    | A    | 19890111 | DK 1988-3825    | 19880708 |

|                      |    |          |                |          |
|----------------------|----|----------|----------------|----------|
| DK 170360            | B1 | 19950814 |                |          |
| AU 8818861           | A  | 19890127 | AU 1988-18861  | 19880708 |
| AU 606701            | B2 | 19910214 |                |          |
| ZA 8804937           | A  | 19900328 | ZA 1988-4937   | 19880708 |
| JP 01063516          | A  | 19890309 | JP 1988-173620 | 19880711 |
| US 4877800           | A  | 19891031 | US 1988-217450 | 19880711 |
| CA 1328077           | C  | 19940329 | CA 1988-571649 | 19880711 |
| PRAI GB 1987-16337   | A  | 19870710 |                |          |
| EP 1988-306207       | A  | 19880707 |                |          |
| OS MARPAT 111:146823 |    |          |                |          |
| GI                   |    |          |                |          |

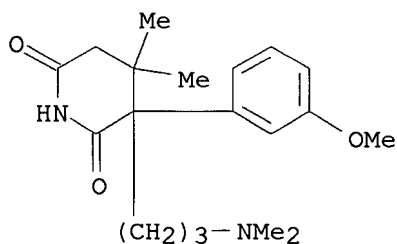


AB Phenyl-3-aminoalkyl-4-methyl-2,6-dioxopiperidine derivs. (I; R1, R3 = H, alkyl; n = 1,2; R2 = H, Me, provided that R2 = H when n = 2; R4 = alkyl; R5,R6 = H, Me; m = 0-3; Y is in a meta- or para-position; Y = OH, alkoxy, alkyl, hydroxyalkyl, halo, CF3, provided that OH and alkoxy are not in the para-position) or its salts are used for the manufacture of pharmaceuticals used in the treatment of psychosis. Hyperactivity was induced in rats via stereotaxic surgery, i.e. implantation of cannulae for intracerebral infusion of dopamine into the center of the nucleus accumbens and 25 µg dopamine was thus infused over a 24 h time period. Dopamine-induced hyperactivity occurred in a biphasic pattern between days 2-5 and 9-12 of treatment and could be antagonized with 0.01-10 mg/kg i.p. doses of 3-(3'-methoxyphenyl)-3-(3''-N,N-dimethylaminopropyl)-4,4-dimethyl-2,6-dioxopiperidine (II); a lower dose of II (0.00001 mg/kg) controlled the 2nd peak but prevented control of the 1st peak. After withdrawal of II and dopamine a rebound of hyperactivity was not observed; persistent or excessive motor depression was not observed either with II during treatment. Fluphenazine at a 0.025-0.05 mg/kg dose was also effective in controlling dopamine-induced hyperactivity, however, after withdrawal, a rebound activity was observed. Tablets contained II 1, lactose 51.5, dried maize starch 45, and Mg stearate 1.5 mg each.

IT 53873-21-5 117576-37-1  
RL: BIOL (Biological study)  
(antipsychotic agent)

RN 53873-21-5 CAPLUS

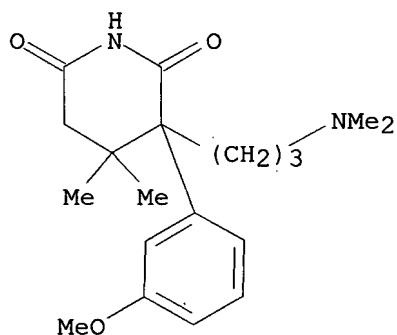
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



RN 117576-37-1 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

Rotation (-).



L5 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1989:540496 CAPLUS

DN 111:140496

TI 2,6-Piperidinediones as analgesics

IN Roberts, Malcolm Henry Traffod

PA National Research Development Corp., UK

SO Eur. Pat. Appl., 22 pp.

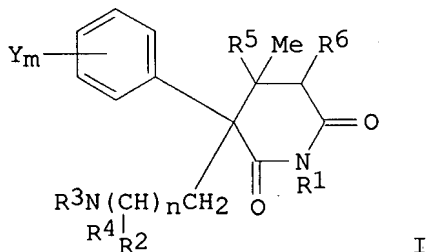
CODEN: EPXXDW

DT Patent

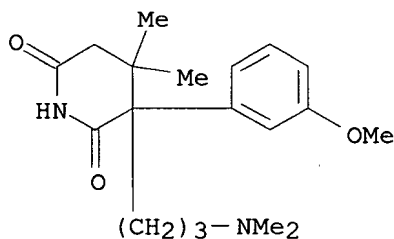
LA English

FAN.CNT 1

|      | PATENT NO.                                    | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | EP 295836                                     | A2   | 19881221 | EP 1988-305317  | 19880610 |
|      | EP 295836                                     | A3   | 19890719 |                 |          |
|      | EP 295836                                     | B1   | 19920902 |                 |          |
|      | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE |      |          |                 |          |
|      | GB 2205745                                    | A    | 19881221 | GB 1988-13796   | 19880610 |
|      | GB 2205745                                    | B    | 19900919 |                 |          |
|      | AT 80035                                      | T    | 19920915 | AT 1988-305317  | 19880610 |
|      | AU 8817676                                    | A    | 19881222 | AU 1988-17676   | 19880614 |
|      | AU 606424                                     | B2   | 19910207 |                 |          |
|      | US 4871750                                    | A    | 19891003 | US 1988-206273  | 19880614 |
|      | DK 8803282                                    | A    | 19881217 | DK 1988-3282    | 19880615 |
|      | ZA 8804275                                    | A    | 19890530 | ZA 1988-4275    | 19880615 |
|      | JP 01016763                                   | A    | 19890120 | JP 1988-149237  | 19880616 |
| PRAI | GB 1987-14033                                 | A    | 19870616 |                 |          |
|      | GB 1987-14374                                 | A    | 19870619 |                 |          |
|      | EP 1988-305317                                | A    | 19880610 |                 |          |
| OS   | MARPAT 111:140496                             |      |          |                 |          |
| GI   |   |      |          |                 |          |

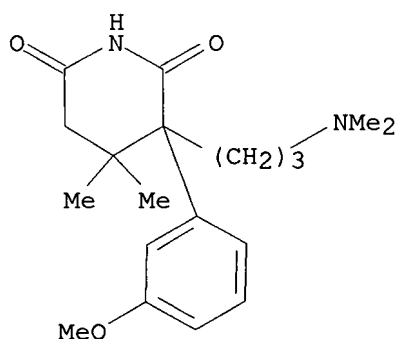


- AB Phenyl-3-(aminoalkyl)-4-methyl-2,6-piperidinediones I (R1 = H, C1-4 alkyl; R2 = H, Me with one R2 = H when n = 2; R3 = H, Me, Et; R4 = Me, Et; R5, R6 = H, Me; Y = OH, MeO, EtO, Me, Et, HOCH2, hydroxyethyl, halo, CF3; n = 1, 2; m = 0-3 with each Y in a meta or para position) or their salts are useful as analgesics. Using the tail-flick latency test, (-)-3-(3-methoxyphenyl)-3-[3-(dimethylamino)propyl]-4,4-dimethyl-2,6-piperidinedione [(-)-II] injected into rats at 2 mg/kg had a strong analgesic effect with the peak response delayed until 20 min after the injection and baseline latencies were not recovered until 2 h after the injection; the potency was of the same order of magnitude as morphine with a similar time course of effect. Naloxone, known to block drug actions at opioid receptors, failed to reduce the potency of this compound. Tablets contained II 50, lactose 51.5, dried corn starch 45, and Mg stearate 1.5 mg/tablet.
- IT 53873-21-5 117576-37-1  
 RL: BIOL (Biological study)  
 (analgesic pharmaceuticals containing)
- RN 53873-21-5 CAPLUS
- CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



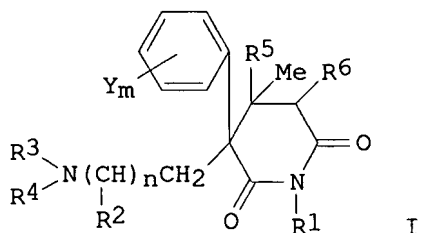
- RN 117576-37-1 CAPLUS
- CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

Rotation (-).



L5 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1988:622491 CAPLUS  
 DN 109:222491  
 TI Anxiolytic compositions containing dioxopiperidine derivatives  
 IN Gittos, Maurice Ward; Costall, Brenda  
 PA National Research Development Corp., UK  
 SO Eur. Pat. Appl., 34 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 2

|      | PATENT NO.                                    | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | EP 263594                                     | A2   | 19880413 | EP 1987-307860  | 19870904 |
|      | EP 263594                                     | A3   | 19890802 |                 |          |
|      | EP 263594                                     | B1   | 19920624 |                 |          |
|      | R: BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE |      |          |                 |          |
|      | GB 2181346                                    | A    | 19870423 | GB 1986-21577   | 19860908 |
|      | GB 2181346                                    | B    | 19891004 |                 |          |
|      | GB 2196251                                    | A    | 19880427 | GB 1987-20813   | 19870904 |
|      | GB 2196251                                    | B    | 19900704 |                 |          |
|      | CA 1316112                                    | C    | 19930413 | CA 1987-546240  | 19870904 |
|      | DK 8704654                                    | A    | 19880309 | DK 1987-4654    | 19870907 |
|      | AU 8778109                                    | A    | 19880310 | AU 1987-78109   | 19870907 |
|      | AU 602716                                     | B2   | 19901025 |                 |          |
|      | JP 63101361                                   | A    | 19880506 | JP 1987-225124  | 19870908 |
|      | AU 9059784                                    | A    | 19901101 | AU 1990-59784   | 19900724 |
| PRAI | GB 1986-21577                                 | A    | 19860908 |                 |          |
|      | GB 1987-16339                                 | A    | 19870710 |                 |          |
|      | GB 1985-22455                                 | A    | 19850911 |                 |          |
|      | GB 1986-3909                                  | A    | 19860217 |                 |          |
|      | GB 1986-3910                                  | A    | 19860217 |                 |          |
|      | GB 1987-16359                                 | A    | 19870710 |                 |          |
| OS   | MARPAT 109:222491                             |      |          |                 |          |
| GI   |   |      |          |                 |          |



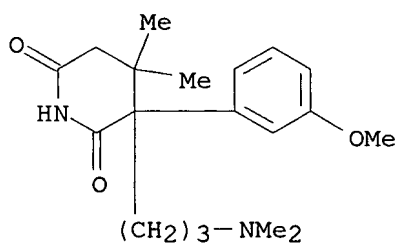
AB A pharmaceutical composition in unit dose form comprises, with a pharmaceutically acceptable diluent or carrier, 10-7-10-1 mg/unit dose of 3-phenyl-3-aminoalkyl-4-methyl-2,6-dioxopiperidines I (R1 = H, C1-4 alkyl; n = 1,2; R2 = H, Me, provided that one R2 = H when n = 2; R3 = H, C1-2 alkyl; R4 = C1-2 alkyl; R5, R6 = H, Me; m = 0-3; Y = OH, C1-2 alkoxy, C1-2 alkyl, C1-2 hydroxyalkyl, halo, CF3, in meta or para position, provided that OH and alkoxy are not in para position) or pharmaceutically acceptable salts for treatment of anxiety. Native male albino BKW mice in an anti-anxiety test were administered 3(3'-methoxyphenyl)-3(3''-N,N-dimethylaminopropyl)-4,4-dimethyl-2,6-dioxopiperidine (II) in water by s.c. injection or diazepam in PEG and water by i.p. injection. II was as effective as diazepam and, in fact, was exceptionally potent (0.00001-100.0 mg/kg) and showed a dose range of 10 million (106). The dose related effects of II contrasted with the all-or-none response of diazepam. A gelatin capsule formulation comprised II HCl 2.5 and talc 70 mg/capsule.

IT 53873-21-5 92519-16-9 117576-37-1

RL: BIOL (Biological study)  
(anxiolytic)

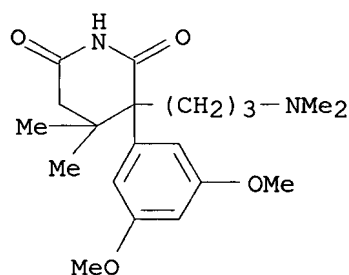
RN 53873-21-5 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



RN 92519-16-9 CAPLUS

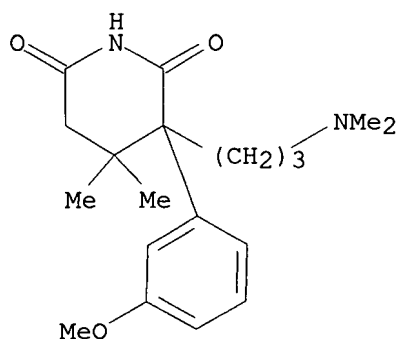
CN 2,6-Piperidinedione, 3-(3,5-dimethoxyphenyl)-3-[3-(dimethylamino)propyl]-4,4-dimethyl- (CA INDEX NAME)



RN 117576-37-1 CAPLUS

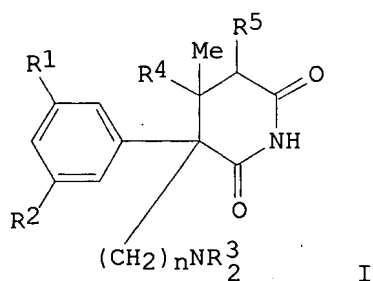
CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl-, (-)- (CA INDEX NAME)

Rotation (-).



L5 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1987:605181 CAPLUS  
 DN 107:205181  
 TI Use of dioxopiperidine derivatives in the treatment of anxiety, for the reduction of abnormally high brain levels of serotonin or 5-hydroxyindoleacetic acid, and in the treatment of bacterial or viral infections  
 IN Gittos, Maurice Ward  
 PA National Research Development Corp., UK  
 SO Eur. Pat. Appl., 38 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 2

|      | PATENT NO.                                | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | EP 216555                                 | A2   | 19870401 | EP 1986-306920  | 19860908 |
|      | EP 216555                                 | A3   | 19891123 |                 |          |
|      | EP 216555                                 | B1   | 19920902 |                 |          |
|      | R: BE, CH, DE, FR, GB, IT, LI, LU, NL, SE |      |          |                 |          |
|      | EP 452765                                 | A2   | 19911023 | EP 1991-105508  | 19860908 |
|      | EP 452765                                 | A3   | 19920610 |                 |          |
|      | R: BE, CH, DE, FR, GB, IT, LI, LU, NL, SE |      |          |                 |          |
|      | DK 8604337                                | A    | 19870312 | DK 1986-4337    | 19860910 |
|      | JP 62061919                               | A    | 19870318 | JP 1986-213704  | 19860910 |
|      | US 4738973                                | A    | 19880419 | US 1986-905525  | 19860910 |
|      | AU 8662601                                | A    | 19870312 | AU 1986-62601   | 19860911 |
|      | AU 588365                                 | B2   | 19890914 |                 |          |
|      | CA 1273879                                | A1   | 19900911 | CA 1986-518034  | 19860911 |
|      | US 4835151                                | A    | 19890530 | US 1987-136996  | 19871223 |
|      | US 4918084                                | A    | 19900417 | US 1989-323308  | 19890314 |
|      | US 4994475                                | A    | 19910219 | US 1989-452343  | 19891219 |
| PRAI | GB 1985-22455                             | A    | 19850911 |                 |          |
|      | GB 1986-3909                              | A    | 19860217 |                 |          |
|      | GB 1986-3910                              | A    | 19860217 |                 |          |
|      | US 1986-905525                            | A3   | 19860910 |                 |          |
|      | US 1987-136996                            | A3   | 19871223 |                 |          |
|      | US 1989-323308                            | A3   | 19890314 |                 |          |
| OS   | MARPAT 107:205181                         |      |          |                 |          |
| GI   |   |      |          |                 |          |



AB The title compds. I (R1 = OMe, OEt, OH; R2 = H, OMe, OEt, OH; R3 = Me, Et; R4, R5 = H, Me; n = 2, 3) or their pharmacol. acceptable acid addition salts are used in medications for treatment of anxiety or to counter the anxiogenic activity of benzodiazepine inverse agonists. They are also used for reduction of chronic high brain levels of serotonin or 5-hydroxyindoleacetic acid, or treatment of bacterial or viral infections. A tablet contained from I (R1 = OMe, R2 = R5 = H, R3 = R4 = Me, n = 3) (II) 100, Tranxene 10, wheat starch 7, lactose 20, and Mg stearate 1 mg. The anxiolytic activity of II in rats was between the activity of chlorodiazepoxide and diazepam, and its sedative effect was less than that of the benzodiazepines. In clin. tests the combination of II and Tranxene decreased anxiety in hospitalized depressive patients. At 120 mg/day, II stopped sleep apnea in a male patient.

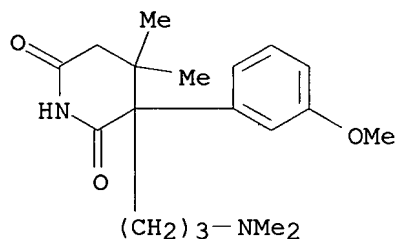
IT 53873-21-5

RL: BIOL (Biological study)

(pharmaceutical, for treatment of anxiety)

RN 53873-21-5 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



L5 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1984:577535 CAPLUS

DN 101:177535

TI Treatment of migraine with dioxopiperidine derivatives

IN Gittos, Maurice W.; Amey, David A.

PA USA

SO U.S., 5 pp.

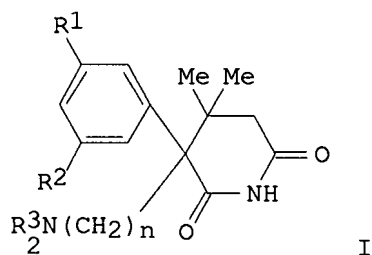
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | US 4461771     | A    | 19840724 | US 1983-471099  | 19830301 |
| PRAI | US 1983-471099 |      | 19830301 |                 |          |
| GI   |                |      |          |                 |          |

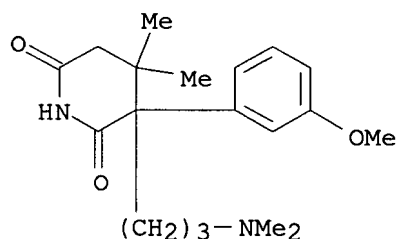


AB Migraine is treated or prevented with I derivs. (R1 and R2 = H, MeO, EtO, or HO, R3 = Me or Et and n = 2 or 3) or their salts. I (R1 = MeO, R2 = H, R3 = Me, n = 3).HCl (II) [53873-28-2] was prepared by intramol.condensation of Et 4-(3-N,N-dimethylaminopropyl)-4-cyano-4-(3-methoxyphenyl)-3,3-dimethylbutanoate [53873-27-1] by refluxing in 2.5N HCl. Tablets were prepared containing 50 mg II each.

IT 53873-21-5P 92519-16-9P  
RL: PREP (Preparation)  
(preparation of, for migraine headache pharmaceuticals)

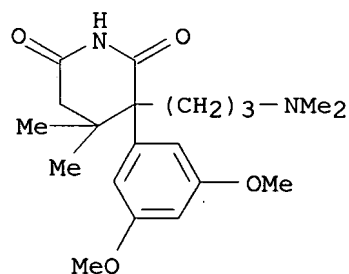
RN 53873-21-5 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



RN 92519-16-9 CAPLUS

CN 2,6-Piperidinedione, 3-(3,5-dimethoxyphenyl)-3-[3-(dimethylamino)propyl]-4,4-dimethyl- (CA INDEX NAME)



L5 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1975:564204 CAPLUS

DN 83:164204

OREF 83:25774h,25775a

TI Alkyl esters, dialkyl amides, and saturated heterocyclic amides of 4-aminoalkyl-4-cyano-4-phenylbutanoic and -but-2-enoic acids

IN Gittos, Maurice W.; Amey, David A.

PA Aspro-Nicholas Ltd., UK  
 SO Ger. Offen., 36 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 2

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | DE 2459077     | A1   | 19750703 | DE 1974-2459077 | 19741213 |
|      | GB 1458537     | A    | 19761215 | GB 1973-58202   | 19741203 |
|      | AU 7476155     | A    | 19760610 | AU 1974-76155   | 19741206 |
|      | ZA 7407769     | A    | 19760825 | ZA 1974-7769    | 19741206 |
|      | US 3998965     | A    | 19761221 | US 1974-531556  | 19741211 |
|      | BE 823272      | A1   | 19750612 | BE 1974-151436  | 19741212 |
|      | NL 7416161     | A    | 19750617 | NL 1974-16161   | 19741212 |
|      | DK 7406522     | A    | 19750825 | DK 1974-6522    | 19741213 |
|      | FR 2254329     | A1   | 19750711 | FR 1974-41315   | 19741216 |
|      | JP 50089343    | A    | 19750717 | JP 1974-144360  | 19741216 |
|      | US 4035497     | A    | 19770712 | US 1976-679165  | 19760422 |
| PRAI | GB 1973-58202  | A    | 19731215 |                 |          |
|      | GB 1972-59761  | A    | 19721228 |                 |          |
|      | US 1973-425876 | A2   | 19731218 |                 |          |
|      | US 1974-531556 | A3   | 19741211 |                 |          |

GI For diagram(s), see printed CA Issue.

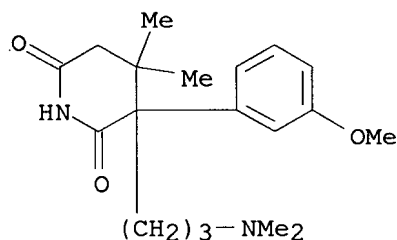
AB Butenoate I, isolated as the H oxalate, was prepared by treating NaH and m-MeOC6H4CH(CN)CH2CH2NMe2 in Me2SO with PhSO2OCeC(CO2Et)2. Butanoic acid derivative II (R = R1 = R2 = Me, R3 = H, R4 = OEt, n = 3) (III) was prepared from m-MeOC6H4CH(CN)(CH2)3NMe2 and 3,3-dimethyl-1-ethoxyprop-2-enylidenemorpholinium tetrafluoroborate. II (R = PhCH2, Me; R1, R2 = H or Me; R3 = Me or H; R4 = morpholino, n = 2 or 3) were prepared from IV and the appropriate morpholinium tetrafluoroborate. II (R = R1 = R3 = Me, R2 = H, R4 = morpholino, n = 2) was prepared by treating Me2NCH2CH2C(CN)(C6H4OMe-m)CHMeCMe:C(OEt)R5 (R5 = morpholino) with MeSO3H and NaI in EtOH. I and III were cyclized to hydroxyridines with NH3. I and II have antidepressant and cardiovascular activity (no data).

IT 53873-21-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 53873-21-5 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)



L5 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1974:520488 CAPLUS

DN 81:120488

OREF 81:19043a,19046a

TI Antidepressant 3-(aminoalkyl)-3-phenyl-2,6-dioxopiperidines or -tetrahydropyridines

IN Gittos, Maurice W.; Amey, David A.

PA Aspro-Nicholas Ltd.

SO Ger. Offen., 52 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | DE 2363052     | A1   | 19740711 | DE 1973-2363052 | 19731219 |
|      | DE 2363052     | C2   | 19880721 |                 |          |
|      | AU 7363761     | A    | 19750619 | AU 1973-63761   | 19731218 |
|      | US 3963729     | A    | 19760615 | US 1973-425876  | 19731218 |
|      | ZA 7309598     | A    | 19741127 | ZA 1973-9598    | 19731220 |
|      | BE 808958      | A1   | 19740621 | BE 1973-139144  | 19731221 |
|      | GB 1455687     | A    | 19761117 | GB 1972-59761   | 19731227 |
|      | FR 2212147     | A1   | 19740726 | FR 1973-46908   | 19731228 |
|      | JP 49094683    | A    | 19740909 | JP 1974-4486    | 19731228 |
|      | JP 60053014    | B    | 19851122 |                 |          |
|      | US 4035497     | A    | 19770712 | US 1976-679165  | 19760422 |
| PRAI | GB 1972-59761  | A    | 19721228 |                 |          |
|      | GB 1973-58202  | A    | 19731215 |                 |          |
|      | US 1973-425876 | A2   | 19731218 |                 |          |
|      | US 1974-531556 | A3   | 19741211 |                 |          |

GI For diagram(s), see printed CA Issue.

AB About 20 hydrogenated pyridines I ( $n = 2$  or  $3$ ;  $R = \text{Me}_2\text{N}$ ,  $\text{Et}_2\text{N}$ , or  $\text{PhCH}_2\text{NMe}$ ;  $R_1 = \text{H}$ ,  $3\text{-MeO}$ , or  $4\text{-Cl}$ ;  $R_2 = \text{H}$ ,  $\text{Me}$ , or  $\text{Et}$ ;  $R_3 = \text{H}$  or  $\text{Me}$ ;  $R_4 = \text{H}$ ,  $\text{Me}$ , or  $\text{CO}_2\text{Et}$ ) and II ( $R_5 = \text{Me}$  or  $\text{Et}$ ;  $R_6 = \text{H}$  or  $\text{CO}_2\text{Et}$ ) or their salts were prepared. I had antidepressant and minor parasympatholytic activity when tested i.p. in the rat. Thus,  $3\text{-MeOC}_6\text{H}_4\text{CH}(\text{CN})(\text{CH}_2)_n\text{NMe}_2$  (III,  $n = 3$ ) was treated with  $\text{NaH}$  in  $\text{Me}_2\text{SO}$  and with  $4\text{-(1-ethoxy-3,3-dimethyl-2-propenylidene)morpholinium tetrafluoroborate}$  to give  $3\text{-MeOC}_6\text{H}_4\text{C}(\text{CN})[(\text{CH}_2)_3\text{NMe}_2]\text{CMe}_2\text{CH:CR}_7\text{-OEt}$  ( $R_7 = \text{morpholino}$ ), which was cyclized in  $\text{H}_2\text{SO}_4$  and  $\text{AcOH}$  at  $100^\circ$  to give I ( $n = 3$ ,  $R = \text{Me}_2\text{N}$ ,  $R_1 = 3\text{-MeO}$ ,  $R_2 = R_3 = \text{Me}$ ,  $R_4 = \text{H}$ ). III ( $n = 2$ ) was treated with  $\text{NaH}$  in  $\text{Me}_2\text{SO}$  and with  $\text{PhSO}_3\text{C}(\text{CO}_2\text{Et})_2$  to give  $3\text{-MeOC}_6\text{H}_4\text{C}(\text{CN})(\text{CH}_2\text{CH}_2\text{NMe}_2)\text{C}(\text{CO}_2\text{Et})_2$ , which on treatment with  $\text{H}_2\text{SO}_4$  and  $\text{AcOH}$  at  $100^\circ$  gave II ( $R_5 = \text{Et}$ ,  $R_6 = \text{CO}_2\text{Et}$ ).

IT 53873-21-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 53873-21-5 CAPLUS

CN 2,6-Piperidinedione, 3-[3-(dimethylamino)propyl]-3-(3-methoxyphenyl)-4,4-dimethyl- (CA INDEX NAME)

